What Is Claimed Is:

1. A liquid crystal on silicon structure incorporating integrated spacers and silicon light valves comprising:

a silicon substrate having a first multiplicity of pixel electrodes formed on a top surface;

a second multiplicity of integrated spacers formed of an insulating material on said top surface of the silicon substrate in-between said first multiplicity of pixel electrodes;

a third multiplicity of silicon light valves formed on said top surface of the silicon substrate for orienting liquid crystal molecules;

a glass substrate that is optically transparent having an optically transparent electrode layer coated on a bottom surface positioned juxtaposed to and over said silicon substrate supported by said second multiplicity of integrated spacers forming a sealed cavity by engaging a perimeter seal surrounding said two substrates, said sealed cavity encases said optically transparent electrode layer and said third multiplicity of silicon light valves therein; and

a liquid crystal material filling said sealed cavity.

2. A liquid crystal on silicon structure incorporating integrated spacers and silicon light valves according to claim 1 further comprising a multiplicity of multi-domain homeotropically aligned liquid crystal cell.

3. A liquid crystal on silicon structure incorporating integrated spacers and silicon light valves according to claim 1 further comprising a multiplicity of lines formed of insulating material protruding from said top surface of the silicon substrate for forming a multi-domain homeotropically aligned liquid crystal cell.

4. A liquid crystal on silicon structure incorporating integrated spacers and silicon light valves according to claim 1 further comprising a multiplicity of elongated recesses formed in a metal layer on said top surface of the silicon substrate for forming a fringe field homeotropically aligned liquid crystal cell.

5. A liquid crystal on silicon structure incorporating integrated spacers and silicon light valves according to claim 2, wherein each of said liquid crystal cell having a square configuration with a dimension of each side between about 5 μm and about 20 μm.

6. A liquid crystal on silicon structure incorporating integrated spacers and silicon light valves according to claim 2, wherein each of said liquid crystal cell having a square configuration with a distance to an immediate adjacent pixel at between about 0.3 μm and about 2 μm.

7. A liquid crystal on silicon structure incorporating integrated spacers and silicon light valves according to claim 2, wherein the liquid crystal material that fills said sealed cavity being a chiral-type liquid crystal.

8. A liquid crystal on silicon structure incorporating integrated spacers and silicon light valves according to claim 1, wherein said second multiplicity of integrated spacers being formed of silicon oxide, silicon nitride or silicon oxynitride.

9. A liquid crystal on silicon structure incorporating integrated spacers and silicon light valves according to claim 4, wherein said metal layer is formed by a metal selected from the group consisting of Al, Ag and Al-Nd.

10. A liquid crystal on silicon structure incorporating integrated spacers and silicon light valves according to claim 1, wherein each of said third multiplicity of silicon light valves being formed of a polysilicon tip and a dielectric material base.

11. A liquid crystal on silicon structure incorporating integrated spacers and silicon light valves according to claim 1, wherein said top surface of the silicon substrate being covered by a layer of metallic reflective film.

12. A liquid crystal on silicon structure incorporating integrated spacers and silicon light valves according to claim 1, wherein each of said second multiplicity of integrated spacers having a height between about 0.5 μm and about 10 μm.

13. A liquid crystal on silicon structure incorporating integrated spacers and silicon light valves according to claim 1, wherein each of said third multiplicity of silicon light valves having a height between about 0.3 μm and about 3 μm.

14. A method for fabricating a liquid crystal on silicon structure with built-in integrated spacers and silicon light valves comprising the steps of:

providing a silicon substrate having a top surface;

forming a first multiplicity of pixel electrodes on said top surface;

forming a second multiplicity of integrated spacers from an insulating material on said top surface of the silicon substrate in-between the first multiplicity of pixel electrodes;

forming a third multiplicity of silicon light valves on said top surface of the silicon substrate for orienting liquid crystal molecules;

providing a glass substrate that is optically transparent and coating an optically transparent electrode layer on a bottom surface of the glass substrate;

positioning the glass substrate juxtaposed to and over said silicon substrate supported by said second multiplicity of integrated spacers and sealing a perimeter of the two substrates to form a sealed cavity therein between; and

filling the sealed cavity through an inlet a liquid crystal material.

15. A method for fabricating a liquid crystal on silicon structure with built-in integrated spacers and silicon light valves according to claim 14 further comprising the step of forming a multiplicity of multi-domain homeotropically aligned liquid crystal cell in-between said second multiplicity of integrated spacers.

16. A method for fabricating a liquid crystal on silicon structure with built-in integrated spacers and silicon light valves according to claim 14 further comprising the step of forming a multiplicity of protruded lines from an insulating material on said top surface of the silicon substrate for forming a multi-domain homeotropically aligned liquid crystal cell.

17. A method for fabricating a liquid crystal on silicon with built-in integrated spacers and silicon light valves according to claim 14 further comprising the step of forming a multiplicity of elongated recesses in a metal layer on the top surface of the silicon substrate and forming a fringe field homeotropically aligned liquid crystal cell.

18. A method for fabricating a liquid crystal on silicon with built-in integrated spacers and silicon light valves according to claim 14 further comprising the step of forming said second multiplicity of integrated spacers by a material selected from the group consisting of silicon oxide, silicon nitride and silicon oxynitride.

19. A method for fabricating a liquid crystal on silicon with built-in integrated spacers and silicon light valves according to claim 17 further comprising the step of depositing said metal layer from a material selected from the group consisting of Al, Ag and Al-Nd.

20. A method for fabricating a liquid crystal on silicon structure with built-in integrated spacers and silicon light valves according to claim 14 further comprising the step of depositing a metal layer on top of the silicon substrate as a reflective coating layer.